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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,290	06/27/2003	James V. Luciani	NN-BA0334(C1)	5203
34645	7590	10/12/2006	EXAMINER	
JOHN C. GORECKI, ESQ.			HSU, ALPUS	
P.O BOX 553			ART UNIT	
CARLISLE, MA 01741			PAPER NUMBER	
			2616	

DATE MAILED: 10/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/609,290

Applicant(s)

LUCIANI ET AL.

Examiner

Alpus H. Hsu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,49-51,53 and 54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,49-51,53 and 54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

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1. Applicant's arguments with respect to claims 1-3, 49-51 have been considered but are moot in view of the new ground(s) of rejection.
2. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) has been received and approved. The examiner hereby withdraws the nonstatutory double patenting rejection.
3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
5. Claims 1-3 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over ALEXANDER, JR. et al. in U.S. Patent No. 6,452,921 B1, hereinafter referred to as ALEXANDER (newly cited), in view of CALLON in U.S. Patent No. 5,583,862 A, hereinafter referred to as CALLON (newly cited).

Regarding to claims 1 and 54, ALEXANDER discloses a method for supporting multiple Virtual Private Networks in a Multi-protocol Over ATM/Next Hop Resolution Protocol

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(MPOA/NHRP) communication system, by establishing a connection in the communication system; and using source-route information from the routing information field on the packet to identify the connection to the networks (see col. 4, lines 22-55, col. 8, line 38 to col. 9, line 5, col. 9, lines 38-49, col. 10, line 56 to col. 11, line 13).

ALEXANDER differs from the claims, in that, it does not disclose the feature of in-band signaling on the connection to identify virtual private networks assigned to the connection, which is well known in the art and commonly used in communications field for virtual network routing purpose.

CALLON, for example, from the similar field of endeavor, teaches the feature of in-band signaling on the connection to identify virtual private networks assigned to the connection for virtual network routing (see col. 4, lines 29-38, col. 5, lines 10-35, col. 5, line 52 to col. 6, line 7), which can be easily adopted by one of ordinary skill in the art to implement into the method in ALEXANDER to provide internetwork routing for virtual networks environment to further improve the system efficiency.

Regarding claims 2 and 3, ALEXANDER does not disclose the features of adding/removing a Virtual Private Network to/from the connection, which is well known in the art and commonly applied in communications network for providing internetworking services, which can be easily adopted by one of ordinary skill in the art into the method in ALEXANDER for increasing the data transport efficiency.

6. Claims 49, 50 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over BROWN et al. in U.S. Patent No. 6,279,035 B1, hereinafter referred as BROWN (of record), in view of CALLON (newly cited).

Regarding claims 49 and 50, BROWN discloses a method for supporting multiple Virtual Private Networks using the Next Hop Resolution Protocol (NHRP), the method comprising: determining a Virtual Private Network for each NHRP message; and converting between MPOA and NHRP messages (see col. 3, lines 26-33).

BROWN differs from the claims, in that, it does not disclose the specific feature of encoding a Virtual Private Network identifier in a header of each NHRP message packet, which is well known in the art and commonly applied in ATM networking field for header processing for data routing purpose. CALLON, for example, from the similar field of endeavor, teaches the use of Virtual Private Network identifiers in headers of each message packet (see col. 4, lines 29-38, col. 5, lines 10-35, col. 5, line 52 to col. 6, line 7), which can be easily adopted by one of ordinary skill in the art into the method in BROWN to provide the packet encapsulation for data routing purpose to further improve the system reliability and speed.

Referring to claim 53, ALEXANDER discloses that the NHRP messages are NHRP control messages (see col. 8, line 54 to col. 9, line 5).

7. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over BROWN in view of CALLON, as applied to claims 49 and 50 above, and further in view of ALLAN et al. in U.S. Patent No. 5,946,313 A, hereinafter referred as ALLAN (of record).

Regarding claim 51, the method from BROWN in view of CALLON differs from the claim, in that, it does not disclose the specific header being a Logical Link Control/SubNetwork Attachment Point (LLC/SNAP) header, which is also a well known form of header commonly used in ATM networking field. ALLAN, for example, from the similar field of endeavor, teaches such header (see col. 7, lines 55-59, col. 8, lines 30-41), which can be easily adopted by

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one of ordinary skill in the art into the method from BROWN in view of CALLON to provide a specific header for the message packet as required by the user or designer.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Civanlar et al., Feldman et al., Kshirsagar et al. and Shaio et al. are additionally cited to show the common feature of ATM backbone virtual LAN utilizing virtual channels for connections between networks similar to the claimed invention.

Casey is further cited to show the feature of virtual private network identifier utilization in internetwork routing including virtual networks environment similar to the claimed invention.

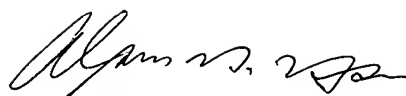
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alpus H. Hsu whose telephone number is (571)272-3146. The examiner can normally be reached on M-F (5:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571)272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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AHH

A handwritten signature in black ink, appearing to read 'Alpus H. Hsu', written in a cursive style.

Alpus H. Hsu
Primary Examiner
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